Abstract

With the help of a method and device for nozzle-jetting oxygen into a synthesis reactor, e.g. for oxy-dehydration, with largely axial flow of the gas mixture through a catalyst bed, it is intended to vastly improve the mixing-in and mixing-through of oxygen above the catalyst especially for oxy-dehydration process.

This is achieved by feeding the oxygen to a ring distributor system arranged above the catalyst bed in pure form, as air or mixed with inert gas or water vapour and jetting the oxygen onto the catalyst surface through several exit openings in the ring distributor at an inclined angle deviating from the vertical.

See also drawing: Fig. 2